

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/731,645	12/08/2003	Yasuto Sakai	524941/0022	4946	
75	90 09/22/2005		EXAMINER		
Lawrence Ros		VO, ANH T N			
Stroock & Stroo 180 Maiden Lar	ock & Lavan LLP	ART UNIT	PAPER NUMBER		
New York, NY	<del></del>	2861			
			DATE MAILED: 09/22/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.		Applicant(s)					
		10/731,645	'	SAKAI ET AL.					
		Examiner		Art Unit					
		Anh T.N. Vo		2861					
The MAILING DATE Period for Reply	of this communication app	pears on the	over sheet with the c	orrespondence a	ddress				
WHICHEVER IS LONGER  - Extensions of time may be available after SIX (6) MONTHS from the mile.  - If NO period for reply is specified a Failure to reply within the set or expense.	above, the maximum statutory period tended period for reply will, by statute ter than three months after the mailing	OATE OF THI 136(a). In no even will apply and will e, cause the applic	S COMMUNICATION t, however, may a reply be time expire SIX (6) MONTHS from ation to become ABANDONE	N. hely filed the mailing date of this of U.S.C. § 133).	,				
Status									
1) Responsive to comr	munication(s) filed on								
,— ,									
3)☐ Since this applicatio	/								
closed in accordance	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
4)⊠ Claim(s) <u>1-19</u> is/are	4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.								
4a) Of the above cla	4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/a	Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-13,17 an</u>	☐ Claim(s) <u>1-13,17 and 18</u> is/are rejected.								
7) Claim(s) <u>14-16 and</u>	19 is/are objected to.								
8) Claim(s) are	subject to restriction and/o	or election red	quirement.						
Application Papers									
9) The specification is o	bjected to by the Examine	er.							
10) The drawing(s) filed	on is/are: a)	cepted or b)	] objected to by the E	Examiner.					
Applicant may not req	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing	sheet(s) including the correct	tion is required	I if the drawing(s) is obj	ected to. See 37 C	FR 1.121(d).				
11)☐ The oath or declarati	ion is objected to by the Ex	xaminer. Not	the attached Office	Action or form P	TO-152.				
Priority under 35 U.S.C. § 11	9								
12) Acknowledgment is a	made of a claim for foreign	nriority unde	er 35 U.S.C. & 119(a)	-(d) or (f)					
•	12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:								
·—	·								
· · · · · · · · · · · · · · · · · · ·									
3. Copies of the									
application fro	application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.									
		•							
Attachment(s)									
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)									
2) Notice of Draftsperson's Paten	t Drawing Review (PTO-948)		Paper No(s)/Mail Da						
<ol> <li>Information Disclosure Statem Paper No(s)/Mail Date 12/08/2</li> </ol>		,	6) Other:	ce of Informal Patent Application (PTO-152) r:					

Application/Control Number: 10/731,645

Art Unit: 2861

**DETAILED ACTION** 

**Priority** 

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTO 1449 have been considered

Claim Objection

Claims 9, 12-14 are objected to because of the following informalities: "a" or "an" should be changed to --said-- before "penetrating part", "caulking part" and "engaging part".

Appropriate correction is required.

**CLAIM REJECTIONS** 

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international

Page 2

Application/Control Number: 10/731,645

Art Unit: 2861

application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 17 are rejected under 35 USC 102 (b) as being anticipated by Okubo et al. (US Pat 6,106,112).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

Okubo et al. disclose in Figure 1 an ink feed container comprising:

- a container body (1) having an opening part, which is opened, at a first side face;
- a lid (25), which is attached to said first side face of said container body (1), for covering said opening part;
- a penetrating part (10) formed at said container body (1); and a caulking part (26) formed at said lid (25) and inserted into said penetrating part (10) in order for a tip part (112, 113, 114) thereof to be caulked (Figures 9-10).

Claims 1, 4-13 and 17-18 are rejected under 35 USC 102 (e) as being anticipated by Kobayashi et al. (US Pat 6,666,551).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

Kobayashi et al. discloses in Figures 5-11 an ink cartridger comprising:

- a container body (10, 11) having an opening part (102), which is opened, at a first side face;
- a lid (12), which is attached to said first side face of said container body (10, 11), for covering said opening part (102);
- a penetrating part (106) formed at said container body (10); and

Art Unit: 2861

- a caulking part (111) formed at said lid (12) and inserted into said penetrating part (106) in order for a tip part (112, 113, 114) thereof to be caulked (Figures 9-10);
- wherein said penetrating part (106) is formed at an engaging part (105), which has an extending part (108) that extends along a second side face adjacent to said first side face (102) of said container body (10, 11);
- wherein said engaging part (105) has an end part (107) a height of which with respect to a direction perpendicular to said second side face is higher than a plane of said extending part.
- wherein said engaging part (105) further comprising a side wall part provided along both side ends of said extending part, and a height of said side wall part with respect to a direction perpendicular to the second side face is higher than the plane of said extending part (Figure 10);
- an engagement hollow part (106), which is provided at said container body and has substantially the same width as said engaging part (105), for accepting said engaging part, wherein a depth of said engagement hollow part is substantially the same as that of said end part in a direction perpendicular to said second side face (Figure 10);
- wherein said container body (10, 11) is provided with said engaging part respectively at a plurality of said second side faces (a second side face contains a groove 106) adjacent to said first side face (102), and said penetrating part (106) of said engaging part (105) at first one of said plurality of said second side faces is a penetrating hole (106) in order for said caulking part (111) to be inserted, while said penetrating part of said engaging part at second one of said plurality of said second side faces is formed as a notch in order for said caulking part to be inserted (Figures 9-10);
- wherein a caulking part (121), which extends in a direction perpendicular to said first side face (102), is formed at said lid (12), while a penetrating part (106), into which said caulking part (111) is inserted, is formed at said container body (10, 11), which does not have said caulking part (111) (Figures 5-6 and 9-10);
- wherein a liquid supplying part (125) is formed at a side face adjacent to said first side face of said container body and communicates with a liquid containing chamber (14) formed at said container body (10, 11), and said container body (10, 11) is provided with a plurality of engaging parts (105), which extend a long a second side face adjacent to said first side face (105) in order to hold said liquid supplying part (125), while said lid (12), which does not have said engaging

Application/Control Number: 10/731,645

Art Unit: 2861

parts (105), is provided with a plurality of caulking parts (111), one of which is inserted into said penetrating part (106) provided at said engaging part (105) (Figures 8 and 10).

Page 5

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-3 are rejected under 35 USC 103 (a) as being unpatentable over Kobayashi et al. (US Pat. 6,666,551) in view of Inoue et al. (US Pat. 6,773,099).

Kobayashi et al. discloses the basic features of the claimed invention as stated above but does not discloses a sealing member having flexibility for forming a liquid containing chamber, which is a closed space for containing a liquid in association with said container body by sealing said opening part of said container body, wherein said sealing member is covered by said lid at said first side face and wherein said sealing member comprises a sealing member extending part, which extends to an area facing an edge part of said cartridge body and an edge part of said lid, and said sealing member extending part is fixed by being put between said edge part of said cartridge body and said edge part of said lid.

Inoue et al. disclose in Figure 2 an ink tank comprising:

- a sealing member (11) having flexibility for forming a liquid containing chamber (S), which is a closed space for containing a liquid in association with said container body by sealing said opening part of said container body (10), wherein said sealing member is covered by said lid (13) at said first side face; and
- wherein said sealing member (11) comprises a sealing member extending part, which extends

Art Unit: 2861

to an area facing an edge part of said cartridge body (10) and an edge part of said lid (13), and said sealing member extending part is fixed by being put between said edge part of said cartridge body (10) and said edge part of said lid (13).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Inoue et al. in the Kobayashi et al. ink cartridge for the purpose of generating a required negative pressure in the ink cartridge.

### Allowable Subject Matter

Claim 14 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses a liquid cartridge for supplying a liquid by being mounted on a liquid ejecting apparatus comprising a groove part, which is provided at two side faces of said container body or said lid, wherein said two side faces are parallel to each other among second side faces adjacent to said first side face, and extend to be parallel to said first side face, and a rail part, which is provided at said container body or said lid, which does not have said groove part and is guided by said groove part, wherein said penetrating part and said caulking part are provided at a side face perpendicular to said two side faces, which are parallel, among said second side faces in the combination as claimed.

Claims 15-16 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because none of the prior art references of record discloses a liquid cartridge for supplying a liquid by being mounted on a liquid ejecting apparatus comprising a memory supporting part for supporting a memory for storing information about a liquid at a second side face adjacent to said first side face of said container body, wherein said memory supporting part is attached to said container body to cover at least one of said caulking parts in the combination as claimed.

Claim 19 would be allowable if rewritten to include all of the limitations of the base

Art Unit: 2861

claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses a method for manufacturing a liquid cartridge comprising a step of fitting said penetrating part, which penetrates in a direction perpendicular to said first side face, with said caulking part, which extends in a direction perpendicular to said first side face, by turning said lid toward said container body, taking a fitted part between said penetrating hole and said caulking part as a turning center in the combination as claimed.

### Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. The prior art references (US Pat. 6,070,976; US Pat. 6,281,911; US Pat. 6,286,950; US pat. 6,409,326; US Pat. 6,758,556) cited in the PTO 892 form show an ink cartridge that is deemed to be relevant to the present invention. These references should be reviewed.

#### **CONCLUSION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M.to 7:00 P.M.. The fax number of this Group 2861 is (571) 273-8300.

PRIMARY EXAMINER September 20, 2005